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19	GOOGLE LLC,	Case No. 3:20-cv-06754-WHA		
	COUGED EDG,	Related to Case No. 3:21-cv-07559-WHA		
20	Plaintiff and Counter-defendant,			
,		SONOS, INC.'S OPPOSITION TO		
21	V.	GOOGLE'S MOTION TO STRIKE EXPERT REPORTS		
22	SONOS, INC.,	EAPERI REPORTS		
	Bortos, fre.,	Date: March 9, 2023		
23	Defendant and Counter-claimant.	Time: 8:00 a.m.		
		Place: Courtroom 12, 19 th Floor		
24		Judge: Hon. William Alsup		
25		dadge. Hom william Hisap		
دے		Complaint Filed: September 28, 2020		
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I. <u>INTRODUCTION</u>

On January 27, 2023, Sonos filed a motion to strike specific portions of the reports of two of Google's experts for advancing entirely new theories. *See generally* Dkt. 464. Approximately 5 hours later and just minutes before the deadline, Google filed its *own* motion to strike, throwing the kitchen sink at the reports of one of Sonos's technical experts, Dr. Schmidt.

Google's motion to strike contends that Dr. Schmidt relies on previously undisclosed theories. The challenged material was properly disclosed either in Sonos's infringement contentions or as direct rebuttal of the new and undisclosed positions improperly offered by *Google*'s expert, Dr. Bhattacharjee. Google's motion grasps at straws in an attempt to manufacture something "new" in Dr. Schmidt's reports. A brief comparison between Dr. Schmidt's opinions and Sonos's contentions shows Google is wrong.

Specifically, Google alleges that Dr. Schmidt introduced a new interpretation of the Court's Showdown Order (Dkt. 316) on summary judgment and claim construction for the first time in his rebuttal validity report. But Dr. Schmidt reads that Order consistently in all three of his reports—including his opening infringement report. Dr. Schmidt's rebuttal report only found it necessary to expressly articulate the characteristics of a claimed "playback queue" endorsed by the Court once Dr. Bhattacharjee's opening invalidity report deviated from the Court's Order with a novel, untenable reading of the Order.

Next, Google misrepresents Sonos's infringement contentions in order to fabricate an argument that Dr. Schmidt's opinions advance new theories regarding the claimed "remote playback queue" recited by the '033 Patent. But Google's own characterizations of Sonos's contentions throughout this case confirm that Google's present articulation of Sonos's contentions is revisionist. Regardless, Google ignores that Sonos's infringement contentions and Dr. Schmidt's opinions cite, quote, and characterize in a similar way much of the exact same evidence demonstrating the existence of the accused "remote playback queue."

Google also misrepresents Sonos's infringement contentions regarding Google's Hub devices to argue that Dr. Schmidt's infringement opinions rely on new "playback paths" not disclosed in Sonos's contentions. Google's argument, however, is premised on a faulty—and never

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previously disclosed—claim interpretation requiring active playback rather than functional capability. Absent Google's unsupported claim interpretation, it is clear that Sonos did not limit its Hub infringement theories to any specific "playback path." Google's argument also ignores that Dr. Schmidt's opinions do encompass the exemplary "playback path" depicted in Sonos's contentions.

Lastly, Google criticizes Dr. Schmidt for advancing doctrine of equivalents positions in his reply infringement report but conveniently fails to inform the Court that these positions are directly responsive to brand new non-infringement positions advanced for the first time by Google through Dr. Bhattacharjee's rebuttal non-infringement report.

The Court can also deny Google's motion as overbroad: in its request for relief as to each of its four complaints, Google routinely overreaches, sweeping in paragraphs and demonstratives that are not pertinent to the purported bases of Google's complaint. The Court should deny Google's motion to strike in its entirety.

LEGAL STANDARD II.

Patent Local Rule 3 governs, inter alia, disclosure of infringement contentions. The rule requires that a disclosing party provide "reasonable notice why the disclosing party believes it has a reasonable chance of proving its theory at trial." MasterObjects, Inc. v. Meta Platforms, Inc., No. C 21-05428 WHA, 2022 WL 4856269, at *1 (N.D. Cal. Oct. 3, 2022). It does not, however, "require identification of every evidentiary item of proof" *Id.* In other words, the disclosing "party may not conceal its theories from disclosure in its contentions, but a party need not compose its dispositive briefing in its contentions, either." Google LLC v. Sonos, Inc., No. C 20-06754 WHA, 2022 WL 3052559, at *2 (N.D. Cal. Aug. 2, 2022) (Dkt. 315, 4).

A party may not introduce a new theory through an expert report that was not disclosed in the party's interrogatory responses, which applies equally to non-infringement theories as it does infringement theories. See, e.g., Asia Vital Components Co. v. Asetek Danmark A/S, 377 F. Supp. 3d 990, 1004 (N.D. Cal. 2019) ("The Court finds nothing in the text of this district's patent rules relieving parties arguing non-infringement of [the] obligation" to supplement interrogatory responses under FRCP 26(e)). In either case, waiting for an expert report to first disclose a theory

deprives the other party from conducting fact discovery on the issue, which hampers expert discovery as well. Id., 1005. An expert is, however, permitted to expound upon prior opinions to rebut responses offered against the expert, provided the expert's rebuttal opinions do not violate the aforementioned rule. See Dkt. 67, 2; MasterObjects, 2022 WL 4856269, at *4.

III. **ARGUMENT**¹

Google manufactures four complaints about Dr. Schmidt's reports but none has merit. In each instance, Google mischaracterizes either Dr. Schmidt's opinions or Sonos's infringement contentions—or both—and in many instances, Google ignores that Dr. Schmidt's opinions are allowed rebuttal to new positions taken by Google or its expert. Google also overreaches by asking the Court to strike numerous paragraphs and demonstratives from Dr. Schmidt's reports with subject matter that is not within the ambit of Google's four complaints. The Court should accordingly deny Google's motion to strike in its entirety.

Dr. Schmidt Properly and Consistently Applied the Court's Showdown A. **Summary Judgment Order**

Google argues that Dr. Schmidt "proposed a different claim construction" than the Court's construction from the Patent Showdown procedure and only did so "for the first time in his rebuttal report on validity." G.Br., 5. Neither assertion stands up to scrutiny.

To start, in all three of his reports, Dr. Schmidt made clear that in applying the Court's construction of "playback queue" he was guided by the Court's application of that construction to the accused products and Google's prior art in the Court's patent showdown order regarding the '615 Patent ("Showdown Order") (Dkt. 316). See, e.g., Ex. 1, ¶¶113-14; Ex. 2, ¶¶101-108; Ex. 3, ¶¶16-19, 91, 136. In this way, rather than "propose[] a different claim construction" from the Court's, Dr. Schmidt at all times applied the Court's Showdown Order in rendering his opinions. The problem is actually Google's failure to apply the Court's claim construction ruling properly.

Nor did Dr. Schmidt offer a new proposed claim construction. Rather, it only became necessary for Dr. Schmidt to expressly articulate the characteristics of a claimed "playback queue"

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¹ Emphasis has been added herein unless stated otherwise.

as endorsed by the Court in its application of its construction to the accused products and Google's prior art when it became apparent that Google's expert, Dr. Bhattacharjee, *ignored* the Court's Showdown Order in his opening invalidity report. *See, e.g.*, Ex. 2, ¶¶299-322. Dr. Schmidt explained this at his deposition:

And at the time of [my] opening report, I was not really aware that Dr. [Bhattacharjee] was going to try to come up different interpretations of playback queue that were inconsistent with the court's order. So when I discovered that after reading his opening report, which of course I didn't have before I served my opening report, then I was more explicit in reiterating what the court's order was and making it clear why I thought he was not being -- he was not conforming to those characteristics. But those characteristics are indeed embodied in my analysis in my opening report.

Ex. 4, 143:18-144:14.

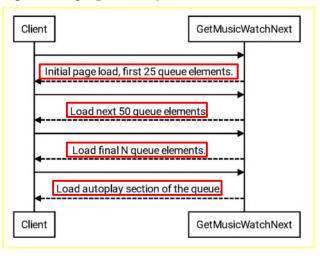
As Dr. Schmidt testified, because his opening infringement report was served contemporaneously with Dr. Bhattacharjee's opening invalidity report, Dr. Schmidt had no way of knowing that Dr. Bhattacharjee was going to deviate from the Court's Showdown Order. Likewise, in his Reply report, Dr. Schmidt responded to Dr. Bhattacharjee's inconsistent (and inaccurate) application of the term "playback queue" across his invalidity and non-infringement reports, and once again, used the characteristics of a claimed "playback queue" endorsed by the Court in doing so. *See, e.g.*, Ex. 3, ¶¶32-35, 37-39. In both instances, Dr. Schmidt was properly rebutting Dr. Bhattacharjee's opinions. *See, e.g.*, *MasterObjects*, 2022 WL 4856269, at *4 (denying motion to strike where expert specified further details about earlier opinion to rebut responsive opinions of another expert).

Google is also wrong in arguing that Dr. Schmdit "failed to identify or address these additional purported requirements for the 'playback queue' in his opening report on infringement." G.Br., 6. Throughout his opening infringement report, Dr. Schmidt addressed these characteristics, but because the accused "remote playback queue" clearly satisfies these characteristics, Dr. Schmidt did not expressly articulate them in the same way he did in his two subsequent reports, where, in rebuttal, Dr. Schmidt identified the flaws with Dr. Bhattacharjee's newly disclosed theories. *See* Ex. 4, 142:18-144:14.

For instance, in his opening report Dr. Schmidt addressed the fact that the accused "remote playback queue" "is the *list* of media items that is *used for playback*" (G.Br., 6). *See e.g.*, Ex. 1, ¶125 ("These cloud servers perform various functions to *enable* Senders (and Receivers) *to playback* YouTube content. For instance, based on the initial user-selected media item or collection of media items at a Sender, the YouTube cloud infrastructure automatically recommends one or more additional media items that *should be played back* by the Sender after the initial media item or collection is played back."), ¶126 ("After a user selects one or more media items for playback at the Sender, the YouTube cloud infrastructure *provides a list of media items for playback* comprising the one or more media items selected by the user and one or more service-recommended media items.").

Dr. Schmidt also explained in his opening report that the accused "remote playback queue" "contains the entire list of media items selected for playback" (G.Br., 6) and only provides "portions" (or "sections") of that list to a Sender at a time. *See, e.g.*, Ex. 1, ¶127 (annotation added to figure):

The below figure from a Google internal document depicts a cloud component of the YouTube cloud infrastructure (the WatchNext service responding to a GetWatchNext call) accessing a list of media items for playback that includes a playlist of media items selected by a user, as well as "autoplay" media items, and transmitting data representing *a portion of that list* to a Sender ("client"):



GOOG-SONOSWDTX-00039785 [Server], 89; see also, id., 88 ("When initiating playback on a long playlist, clients typically make several [GetWatchNext] calls, one for the *initial page load*, one for loading the autoplay contents section, and several for *loading queue continuations*.").

See also, e.g., Ex. 4, 123:11-125:23, 130:2-131:2, 131:10-133:10 (Dr. Schmidt testifying that both his opening and reply infringement reports discuss this same evidence of a Sender receiving only a subset or window of the "Watch Next queue" at a time).

In his opening report, Dr. Schmidt further addressed that something that is "being used merely to process the list of media items for playback" cannot amount to the claimed "playback queue" by explaining that because the Sender's local queue is merely being used to process the list of media items that is provided by Google's cloud servers for playback, that local queue does not amount to the claimed "playback queue," and instead, the list of media items provided by the cloud servers for playback amounts to the claimed "playback queue" (G.Br., 6). See, e.g., Ex. 1, ¶¶128-

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[A]fter a user selects one or more media items for playback at the Sender, the YouTube cloud infrastructure transmits to the Sender data identifying at least an initial media item for playback [from the list of media items provided by the YouTube cloud infrastructure referred to by Dr. Schmidt as the "Watch Next queue"]. For instance, the Sender's *local queue* is often *loaded* with (i) one or more "videoIds" for the initial user-selected media item or collection ... and (ii) one or more videoIds for service-recommended media item(s)

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¶484 (emphasis original):

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[J]ust because a Sender [in Google's purported non-infringing alternative] might maintain a local copy of a queue does not necessarily mean that there is not also "a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service." In fact, as Google argued in connection with the '615 Patent, Google's alleged alternative could be nothing more than a Sender having the means to *process* the list of media items for playback that is provided by the YouTube cloud infrastructure.

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Relatedly, the above citations from his opening infringement report demonstrate that Dr. Schmidt addressed the characteristic that the accused "remote playback queue," rather than the queue on the Sender, is the "queue that 'runs the show'" when the Sender is configured for playback (G.Br., 6). See also, e.g., Ex. 1, ¶480, 484 ("Google's interrogatory response says nothing about any changes to the YouTube cloud infrastructure and/or how and from where the 'local queue' [in Google's purported non-infringing alternative] **gets populated**. As noted, just because a Sender might *maintain* a local copy of a queue does not necessarily mean that there is not also "a remote

playback queue *provided by* a cloud-based computing system associated with a cloud-based media service.") (bold and underline added; bold and italics original).

In sum, Dr. Schmidt consistently applied the Court's Showdown Order in rendering his opinions across all three of his reports. It only became necessary for him to expressly articulate the characteristics of a "playback queue" endorsed by the Court when Dr. Bhattacharjee's opening invalidity report deviated from the Court's Order. Further, Dr. Schmidt's rebuttal validity and reply infringement reports properly rebutted Dr. Bhattacharjee's opinions. As such, Google has no basis to strike any of Dr. Schmidt's opinions.

In any case, the relief that Google requests extends far beyond the purported problem Google claims to identify. See G.Br., 7. It appears that Google blindly identified any instance of Dr. Schmidt referencing the words of the Court—namely, the claimed "playback queue" is the queue that "runs the show"—and asks the Court to strike entire paragraphs that make a mere passing reference to such words. Indeed, Google itself has argued in the context of Sonos's previous motion to strike that the scope of relief must match the identified problem. See, e.g., Dkt. 253.02, 12 (arguing that seeking to strike entire paragraphs that "include[] only a passing reference to the 'menu' button' would be improper). The same logic applies here. Moreover, the scope of relief that Google seeks is additionally facially improper, insofar as Google asks to exclude mere summations of Dr. Schmidt's prior opinions and pure rebuttal opinions that expressly address positions taken by Google and Dr. Bhattacharjee.

Specifically, (i) paragraphs 109-12 of Dr. Schmidt's rebuttal validity report have nothing to do with the challenged four characteristics of the as-applied "playback queue" endorsed in the Court's Showdown Order, (ii) paragraph 132 merely refers back to Dr. Schmidt's opinions from his opening infringement report, (iii) paragraph 329 merely rebuts Dr. Bhattacharjee's invalidity opinions, and (iv) paragraph 1005 merely refers back to Dr. Schmidt's opinions from his opening infringement report (*see* Ex. 1, ¶¶480, 484). Likewise, (i) paragraph 18 of Dr. Schmidt's reply infringement report has nothing to do with the challenged four characteristics of the "playback queue", (ii) paragraphs 38-39 simply rebut Dr. Bhattacharjee's non-infringement positions by pointing out his inconsistencies vis-à-vis his representations to the Court during the Patent

Showdown, (iii) paragraphs 46, 60, 62-63, and 128-30 merely rebut Dr. Bhattacharjee's non-infringement positions and refer back to Dr. Schmidt's opening infringement report, and (iv) paragraphs 65, 68, 132, 139-41, 177 (*see* Ex. 3, ¶175), 184 and 188 merely rebut opinions set forth in Dr. Bhattacharjee's non-infringement report.

Thus, Google's motion to strike should be denied on the additional basis that Google seeks to strike disclosures far outside the scope of the purported problem that Google claims to identify with Dr. Schmidt's opinions regarding the characteristics of a "playback queue."

B. Google Mischaracterizes Sonos's Contentions Regarding the Accused "Remote Playback Queue"

To manufacture an argument that Dr. Schmidt's infringement positions are new, Google mischaracterizes Sonos's infringement contentions and ignores that Dr. Schmidt's reports cite to much of the *exact same* evidence cited in Sonos's contentions for the same purposes. True, Dr. Schmidt's reports cite to additional *evidentiary support* of Sonos's long-standing infringement theories, but that is permitted under the PLRs. *Supra* §II; Dkt. 253.02, 2 (Google arguing that the Patent Local Rules do not mandate disclosure of all contention evidence), 13 (Google arguing an expert can provide evidentiary examples or complementary proof in support of a party's theory).

To start, Google feigns misunderstanding Sonos's infringement contentions regarding limitation 1.4 of the '033 Patent in an attempt to manufacture something strikable in Dr. Schmidt's opinions. In this regard, Google acknowledges that Sonos contends that limitation 1.4's "remote playback queue provided by a cloud-based computing system associated with a cloud-based media service" is satisfied in the accused YouTube system because "[e]ach Cast-enabled computing device installed with any one of the [YouTube apps] is programmed such that it can operate in a mode in which the Cast-enabled computing device is configured for playback of a remote playback queue (referred to herein as a 'Watch Next' queue) provided by one or more cloud servers (e.g., a 'Watch Next,' 'InnerTube,' or 'MDx' server) associated with the [applicable YouTube] media

service." Ex. 5, 9-10²; G.Br., 7. However, Google then misrepresents that Sonos contends that "the accused Watch Next queue' is a list of media item identifiers *contained in a* WatchNext *message* sent to a YouTube application." G.Br., 7. In other words, Google now claims that Sonos contends that the "remote playback queue" is something contained in a message rather than a data structure maintained in the cloud.

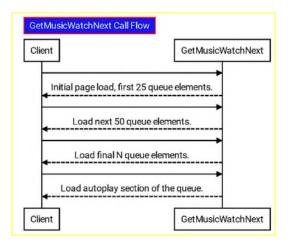
But as Google acknowledged literally a sentence before this misrepresentation, Sonos contends that the "remote playback queue" is what is resident on one or more of Google's cloud servers. Google's own positions throughout this litigation and Google's expert's opinions confirm that Google's purported misunderstanding of Sonos's contentions is a ruse directed at concocting something to strike in Dr. Schmidt's reports.

For example, in its non-infringement interrogatory response, Google has long understood that Sonos accuses a playback queue in the cloud, rather than "media item identifiers contained in a ... message," as satisfying the claimed "remote playback queue." Ex. 6, 48 ("[A] [POSITA] would understand that the plain meaning of a 'remote playback queue ...' in the context of the claims and specification requires a third-party playback queue. The CloudQueue server or MDx is only provided by Google, not supplied by third parties."). As another example, in Google's recent (failed) attempt to re-open claim construction, Google asserted "Sonos proposes in this litigation that the geographic location of *the playback queue* (*in the cloud*) is determinative of whether it is a 'remote playback queue' and that no third-party application is necessary." Dkt. 375, 2. As a further example, in Google's recent motion for summary judgment, Google asserted that "[f]or purposes of infringement, Sonos contends that the term 'remote' does not require a playback queue provided by a third-party application but requires only *a 'playback queue*' that is *geographically distant from the computing* and playback *devices*" and thus, "'a list of multimedia content selected

² See also, e.g., Ex. 5, 10-11 (Sonos contending the Watch Next queue "is remote from the Castenabled computing device" and can "contain (i) a locator of at least one media item that was selected by the user for playback along with (ii) locators for additional media items that were identified by the applicable YouTube service based on the user's selection of the media content and are seeded for playback after the user-selected media content, which are referred to as 'Autoplay'' media items.").

for playback' (i.e., a playback queue) that is provided by a cloud-based computing system is a 'remote playback queue' if it is *not local to the computing* or playback *devices*." Dkt. 483, 6. As yet another example, Google's own expert repeatedly acknowledged in his opening invalidity report that Sonos "contends that the term 'remote playback queue' covers a 'playback queue' that is 'in the cloud' (e.g., a cloud queue) regardless of whether it is provided by a third-party" and Sonos's contentions "identify[] the 'remote playback queue' as 'a 'Watch Next' queue' with 'recommended videos' that is provided by 'one or more cloud servers,' such as 'a 'Watch Next,' 'InnerTube,' or 'MDx' server'." Ex. 7, ¶87; *see also id.*, ¶¶89, 264, 295.

Moreover, Sonos's contentions include excerpts of Google's internal documentation evidencing the existence of a "remote playback queue" provided by Google's cloud servers, including the following diagram showing a smartphone ("client" in the diagram) receiving *sections* (or a subset) of the accused "remote playback queue" at a time from Google's cloud server hosting the "WatchNext" service that responds to "GetWatchNext" requests:



See, e.g., Ex. 5, 15-16 (citing GOOG-SONOSWDTX-00039785). However, contrary to Google's argument, the fact that YouTube's cloud servers send a given section (or subset) of media items from the accused "remote playback queue" to a smartphone running a YouTube app via a WatchNextResponse message does not transform Sonos's contentions into the accused "remote playback queue" being "media item identifiers contained in a ... message." See G.Br., 7.

³ Google's engineer testified that a GetMusicWatchNext request is now handled by the same cloud service that handles GetWatchNext requests for video content.

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Regardless, Sonos's infringement contentions including the above excerpt completely undermines Google's allegation that the purportedly "new requirement" of a "playback queue" identified in Dr. Schmidt's rebuttal validity report "resulted in Sonos changing its infringement theory" with respect to the "entire list" versus "only a 'window' (or subset) of items" G.Br., 8-9. This purportedly "new requirement" was present in Sonos's infringement contentions all along. In sum, this "new requirement" is not new, nor does it transform the accused "remote playback queue" from a data structure in the cloud to something contained in a message.

Next, Google's suggestion that Sonos's contentions did not provide reasonable notice about the relevance of the "PlaylistService" to the claimed "remote playback queue" is also unfounded. *See* G.Br., 7-8.

In fact, Sonos's contentions reproduced an excerpt from Google's document titled "Server" that expounds upon the accused "remote playback queue" by explaining "[t]he PlaylistDocumentService provides a representation of the queue," "[i]t calls into the PlaylistService for video IDs in the playlist," and these cloud services are called via "RPCs" in response to "[GetWatchNext] requests" sent by a "client" (e.g., smartphone) to the WatchNext cloud service. Ex. 5, 15. This "Server" document quoted by Sonos (GOOG-SONOSWDTX-00039785), as well as the next Google document (GOOG-SONOSWDTX-00039798) quoted in Sonos's contentions, provides illustrations depicting how a "client" communicates directly with the WatchNext service, which in turn calls the PlaylistDocumentService that in turn calls the PlaylistService to retrieve videoIds for playback by the "client." Ex. 8, 86, 88-89, 90; Ex. 9, 799-800.

Additionally, Sonos's contentions included source code traces for how a Cast-enabled computing device (e.g., smartphone with a YouTube app) makes calls to the WatchNext service for media items from the Watch Next queue (see Ex. 5, 16-23) and also for how Google's server hosting the WatchNext service responds to GetWatchNext requests by identifying one or more media items from the Watch Next queue for the Cast-enabled computing device to playback (see id., 23-25). The latter source code trace specifically included citations for code responsible for making RPCs the PlaylistDocumentService and PlaylistService. 24 *Id.*. to (citing _playlist_rpc_container.py→PlaylistRpcContainer(), lns. 8-102 and _rpc_manager.py→get_playlist_doc_rpc⁴, lns. 1711-1936). While it is true that Sonos's contentions did not include a specific source code trace for the PlaylistService, the contentions gave Google more than reasonable notice about the PlaylistService's role and why Sonos believes it has a reasonable chance of proving its theory at trial. That is all that PLR 3 requires; Sonos was not required to identify every evidentiary item of proof. *Supra* §II.

When turning to the substance of Dr. Schmidt's reports, Google again misrepresents that Sonos's contention is that the claimed "remote playback queue provided by a cloud-based computing system" is somehow satisfied by "a 'remote playback queue' contained in a message" and asserting that, in contrast, Dr. Schmidt's reports identify a playback queue in the cloud. *See* G.Br., 8-9. But a playback queue in the cloud is exactly what Sonos accused in its contentions.

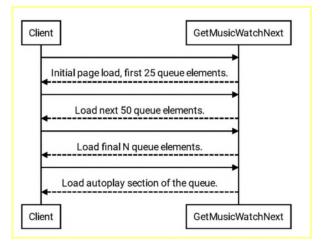
In fact, similar to Sonos's contentions, Dr. Schmidt explained that the accused "Watch Next queue" is provided by "one or more 'Innertube' servers (e.g., that host the 'WatchNext,' 'PlaylistDocumentService,['] and 'PlaylistService' services)" and "[a]s discussed in Google's internal documents, the WatchNext service accesses this Watch Next queue by making calls to the PlaylistDocumentService that in turn makes calls to the PlaylistService." Ex. 1, ¶124-28; see also id., ¶229-35. Unsurprisingly, much of the evidence that Dr. Schmidt cites about the playback queue in the cloud identified in his reports is the same evidence that Sonos's contentions identify and excerpt. For example, in describing the relationship of the WatchNext, PlaylistDocumentService, and PlaylistService in Google's cloud-based computing system, Dr. Schmidt cites to the same "Server" document and quotes the same passage cited in Sonos's contentions and discussed before. Compare Ex. 1, ¶126, with Ex. 5, 15.

As another example, Dr. Schmidt explains "[t]he below figure from a Google internal document depicts a cloud component of the YouTube cloud infrastructure (the WatchNext service responding to a GetWatchNext call) accessing a list⁵ of media items for playback that includes a

⁵ In the next paragraph, Dr. Schmidt notes he refers to this list as the "Watch Next queue."

⁴ As quoted in Dr. Schmidt's opening report, line 1735 of this function states "[g]enerate a request for playlist information from Playlist Document service." Ex. 1,¶248.

playlist of media items selected by a user, as well as 'autoplay' media items, and transmitting data representing a portion of that list to a Sender ('client'):"



Ex. 1, ¶127 (*citing* GOOG-SONOSWDTX-00039785). This is the same document cited, and figure excerpted, in Sonos's contentions that was described and reproduced above.

Thus, there is no basis to Google's assertions that Dr. Schmidt's opinions go beyond Sonos's infringement contentions.

Moreover, it is simply not credible for Google to argue here that (i) paragraphs 128 and 235 of Dr. Schmidt's opening infringement report, (ii) paragraphs 589 of his rebuttal validity report, and (iii) paragraphs 46, 50-52, 67, 69, and 124 of his reply infringement report set forth new infringement theories in view of Google's own arguments that the Court accepted in largely denying Sonos's motion to strike Google's invalidity theories. *See generally* Dkt. 315. Here, as demonstrated in the side-by-side comparison table attached hereto as Exhibit 10, Dr. Schmidt's opinions describe the accused functionality in much the same way as Sonos's contentions and cite and quote many of the same documents as in Sonos's contentions.

In contrast, at summary judgment, Google and its expert relied on various invalidity positions not expressly set forth in Google's contentions and argued this practice was justified because, *inter alia*, Google's contentions (i) cited to a video from which Google's anticipation position could be derived for a given limitation (Dkt. 315, 3-4), (ii) cited to general disclosure from a prior art reference that Google based its obviousness contention on despite its summary judgment obviousness position being based on a specific disclosure that was not previously cited (*id.*, 4-5),

and (iii) cited to a first document that contained "the same key information" as another document relied upon at summary judgment (*id.*, 6-7). In short, if Google's general disclosures from its invalidity contentions were sufficient for Google's much more specific invalidity theories at summary judgment, then Sonos's detailed infringement contentions are sufficient for Dr. Schmidt's detailed reports.

Google also complains that Dr. Schmidt cites additional evidence not expressly cited in Sonos's contentions. *See*, *e.g.*, G.Br., 7, 9 (alleging "Sonos's contentions did not cite to any source code for the PlaylistService" and requesting the Court strike paragraph 248 "as to 'Playlist Service' and 'Playlist Document Service' source code"). But this additional evidence merely corroborates Sonos's contention that Google's cloud-based computing system provides the claimed "remote playback queue." It does not advance any new theory as to limitation 1.4. *See*, *e.g.*, Dkt. 253.02, 20 (Google citing case law for proposition that "[c]ontentions need not disclose specific evidence."). In this regard, at paragraph 248 of his opening infringement report, Dr. Schmidt cites to much of the same source code traced in Sonos's contentions for the WatchNext service (*see* Ex. 5, 23-25), which as described above is the smartphone's entry point into Google's cloud services, but he also cites to functions in the PlaylistDocumentService and PlaylistService source code that simply relate to calls made by the WatchNext service in the code traces included in Sonos's contentions. *See* Ex. 1, ¶248.

As this Court explained in *Oracle Am., Inc. v. Google Inc.*, "[t]hat a particular document or source code file was not cited in a party's infringement disclosures does not automatically preclude the party from using that document or file to support a *theory* that was timely disclosed." No. C 10-3561-WHA, 2011 WL 4479305, *3-4 (N.D. Cal. Sept. 26, 2011) (emphasis original). There, the Court found that it did not matter that a DvmDex.h file was not named in Oracle's infringement contentions despite Oracle's expert citing to it, and specific functions within, as satisfying a given limitation. *Id.* The Court reasoned that Oracle's infringement contentions identified the same functions and its expert merely "described more fully" those functions with reference to the file. *Id.*; *see also*, *e.g.*, Dkt. 253.02, 12 (Google arguing that it was appropriate for Google on summary

judgment to "provide additional explanation regarding why the disclosures in [cited evidence]" satisfy a given claim limitation despite that explanation not being in Google's contentions).

The same analysis applies here. Sonos's contentions identified the claimed "remote playback queue provided by a cloud-based computing system" as being satisfied by Google's cloud servers (including the "WatchNext" and other "InnerTube" servers) that provide a list of media items selected for playback. See e.g., Ex. 5, 9-10. In addition to the WatchNext service, Sonos's contentions specifically identified the PlaylistDocumentService and PlaylistServce cloud services. Id., 15-16. Sonos's contentions also provided a detailed source code trace of how a smartphone interacts with the WatchNext service to obtain media items, including identification of calls made by the WatchNext service to the PlaylistDocumentService and PlaylistServce. Ex. 5, 23-25. In his infringement reports, Dr. Schmidt merely "described more fully" additional source code related to these calls. See also, e.g., Dkt. 315, 7 (Google arguing that "[its] use of a different document to support a theory it disclosed in its contentions does not run afoul of our Patent Local Rules.")

Google also overreaches by asking the Court to strike paragraph 152 of Dr. Schmidt's opening infringement report and paragraphs 60, 62, 67, and 69 of Dr. Schmidt's reply infringement report and several of his demonstratives. G.Br., 9. Google impermissibly attempts to sweep these materials in under the guise that they are new infringement theories. They are not. Instead, these paragraphs and demonstratives merely discuss evidence that contradicts Google's position that the accused "remote playback queue" does not satisfy limitation 1.4. Google provides no explanation to the Court as to why or how the subject matter of these paragraphs and demonstratives⁶ evince any sort of new infringement theory, as opposed to being ordinary rebuttal evidence contradicting Google's position. *See, e.g., MasterObjects*, 2022 WL 4856269, at *4 (denying motion to strike where expert specified further details about earlier opinion to rebut responsive opinions of another expert). What's more, several of Dr. Schmidt's demonstratives merely simplify illustrations shown

⁶ Dr. Schmidt's demonstratives at App'x 4, slides 4-8 and 20 are also permitted for the additional reason that they merely "illustrate[] the description of the [cloud services] in the contentions[.]" *See* Dkt. 315, 5-6.

in documents already cited by him and in Sonos's contentions. *Compare* App'x 4, slides 4-8, *with* Ex. 8, 88-89 *and* Ex. 9, 799-800.

Lastly, Google's complaint here is particularly striking. Google argues that Dr. Schmidt's reports provide more exhaustive details than Sonos's contentions. But Google has stymied Sonos at every step of the way in Sonos's efforts to obtain discovery regarding details of this nature regarding limitation 1.4. For example, Sonos was forced to move to compel Google to provide adequate written discovery on, and a 30(b)(6) witness to testify about, the functionality of YouTube's system that directly relates to limitation 1.4 of the '033 Patent. *See* Dkts. 377, 420. That motion is fully briefed and remains pending before Judge Ryu.

In a similar vein, Google's response to Sonos's interrogatory seeking information directly relevant to limitation 1.4 of the '033 Patent⁷ makes no reference to either the PlaylistService or the PlaylistDocumentService, much less describes their respective roles in Google's cloud services. *See* Ex. 11, pp. 14-15. And it was only in the final month of fact discovery that Google updated its response to generically state "[r]ecommended videos are only temporarily maintained in the cloud and discarded when, for instance, a user restarts playback of the current playlist." *Id.* Google did not otherwise identify where the cloud maintains media items for playback by a smartphone. Google cannot conceal relevant functionality of its system and then feign surprise when Dr. Schmidt provides additional details regarding this functionality. *See, e.g., MasterObjects*, 2022 WL 4856269, at *2-3 (declining to strike expert's theories about "caches" that were concealed by moving party despite infringement contentions not being amended because "[t]his was [moving party's] own system," "[i]t should know the parts most vulnerable to a theory of infringement," and "[i]t cannot now express surprise that [non-movant] finally stumbled onto these (allegedly) infringing parts of the system despite [moving party's] interrogatory responses.").

⁷ Sonos's infringement contentions incorporate by reference Google's responses to certain interrogatories, including to interrogatory no. 15. *See, e.g.*, Ex. 5, 25.

C. Google Mischaracterizes Sonos's Contentions Regarding the Accused Hub Devices

In its third salvo, Google once again mischaracterizes Sonos's infringement contentions and the opinions of Dr. Schmidt, but this time in connection with the accused Hub devices (also known as Cast-enabled displays) and their "stream transfer" functionality. Hub devices are Cast-enabled media players (also referred to as "Receivers") with a touchscreen display that can operate as a standard Receiver, as well as a control device for another Receiver.

Google alleges that Sonos's Hub-based infringement contentions were limited to a single "playback path" involving a user initiating active playback at the Hub device via input at the Hub's touchscreen display. G.Br., 10. In contrast, Google argues, Dr. Schmidt's report introduces two new "playback path[s]": (1) a user initiating active playback at the Hub device via Casting from a smartphone to the Hub device and (2) a user initiating active playback at the Hub device using voice. *Id.*, 9. Google's argument is premised on a faulty—and novel—interpretation of the claims.

Claim 1 requires that the "computing device" have "program instructions stored on [a] non-transitory computer-readable medium that, when executed by [] at least one processor, cause the computing device to perform" recited functions. *See* '033 Patent, cl. 1. In this way, the asserted claims are directed to *functional capability* as opposed to actual performance of method steps. Despite the plain and ordinary meaning of the claim language, Google argues here (and for the first time in Dr. Bhattacharjee's non-infringement report) that limitation 1.4's "operating in a first mode in which the computing device is configured for playback of a remote playback queue" requires the "computing device" to be *actively* playing back to be satisfied. Only under this backdrop can Google even try to argue that Sonos's Hub-based contentions were limited to a single "playback path." But because the claims are drawn to functional capability, it makes no sense that Sonos would have unnecessarily limited its infringement contentions to a single "playback path" at the exclusion of other "playback paths," such as those discussed in Dr. Schmidt's report.

Predictably, Sonos's infringement contentions disclosed that it is the Hub device's *programmed capability* that was relevant rather than any specific "playback path." *See* Ex. 5, 8 ("Each Cast-enabled display is also *programmed with the capability* to operate in a mode in which

the Cast- enabled display is configured for playback of a remote playback queue provided by a cloud-based computing system that takes the form of one or more cloud servers associated with a cloud-based media service (e.g., a Google service such as YouTube, YouTube Music, etc., ...) that are remote from the Cast-enabled display and accessible over the Internet, which may be operated by Google")); see also id., 26. Sonos's contentions also identified examples of initiating playback at the Hub device to demonstrate this capability but never limited its contentions to any one specific example (again, that would make little sense given the asserted claims are directed to capability). See id., 8.

Moreover, Google is wrong to allege that Sonos "never identified in [its] infringement contentions" the two purportedly new "playback paths." G.Br., 9-10. In this respect, Sonos's contentions cite to Google's own support page at https://support.google.com/googlenest/answer/9165738?hl=en and include the following quote: "[w]ith YouTube built-in to your Google Nest display, you can watch YouTube Originals, how-to videos and much more, seamlessly on your screen." *See* Ex. 5, 8. The very next sentence of Google's support page explains, "[t]o control YouTube, you can *use voice commands* like 'Play [name of video]' or 'Pause,' or use the touchscreen display to do the same."

YouTube on Google Nest displays

With YouTube included on your Google Nest display, you can watch YouTube Originals, how-to videos, and much more, seamlessly on your screen. To control YouTube, you can use voice commands like "Play [name of video]" or "Pause," or use the touchscreen display to do the same.

In the same way that Google's general citation to a video in its invalidity contentions was adequate to disclose a specific anticipation theory only gleaned from watching the video itself, Sonos citing and quoting from Google's own support page that describes using voice commands to play media at a Hub device was likewise adequate to disclose the voice "playback path" Google now contends was first identified by Dr. Schmidt. *See* Dkt. 253.02, 5 (Google arguing that its mere citation "to a publicly-available YouTube video showing a user operating the [prior art] software" was enough to put Sonos on notice of Google's anticipation theory), 9-11; Dkt. 315, 2-4.

Google also mischaracterizes Dr. Schmidt's opinions and overreaches in suggesting that paragraphs 178 and 247 of his opening infringement report are limited to the two purportedly-new "playback paths." In this regard, much like Sonos's contentions, Dr. Schmidt's opinions with respect to a Hub device are not limited to any specific "playback path," and Dr. Schmidt points to the same Google support page discussed above (produced as SONOS-SVG2-00060317) and quotes that a user can start playback at a Hub device "us[ing] the touchscreen display" (Ex. 1, ¶178), which Google admits was disclosed in Sonos's infringement contentions. G.Br., 10 ("Sonos's contentions disclosed a playback path in which (i) a user initiates playback on a first Hub Device").

Google also overreaches with respect to paragraphs 146-49 and 152-55 in Dr. Schmidt's reply infringement report. Google has no basis to strike these paragraphs, as they expressly respond to and rebut arguments made by Google's own expert. *See, e.g., MasterObjects*, 2022 WL 4856269, at *4 (denying motion to strike where expert specified further details about earlier opinion to rebut responsive opinions of another expert). In fact, in these paragraphs, Dr. Schmidt explains why Dr. Bhattacharjee's attempt to limit Dr. Schmidt's Hub-based infringement opinions to "a specific mechanism by which the Hub Sender begins playback" (Ex. 3, ¶147) is flawed for many of the same reasons explained herein.

Lastly, Google's assertions that the two purportedly new "playback paths" "are substantially different from the theory in Sonos's contentions" and such differences are apparently "critical" to "the way the Hub Device retrieves media from backend servers" are remarkable for multiple reasons.

First, if Google in fact believed that Sonos's contentions were limited to the single "playback path" whereby a Hub device begins active playback by virtue of user input at the Hub device's touchscreen, Google's responses to Sonos's interrogatory no. 15 seeking information about this accused functionality should have described this purported "substantially different" functionality. Unsurprisingly, Google's interrogatory response provides no such description. *See*

⁸ Sonos's infringement contentions incorporate by reference Google's responses to certain interrogatories, including to interrogatory no. 15. *See, e.g.*, Ex. 5, 27.

Ex. 11, 17. In fact, Google's interrogatory response provides no description of functionality unique to a Hub device at all. *Id.* Thus, Google cannot argue now that "[t]he operation of a Hub Device after initiation of a Cast session is different from the operation of a Hub Device before initiation of a Cast session" (G.Br., 10) for purposes of non-infringement. *See, e.g., Asia Vital*, 377 F. Supp. at 1004 ("The Court finds nothing in the text of this district's patent rules relieving parties arguing non-infringement of [the] obligation" to supplement interrogatory responses under FRCP 26(e)); *MLC Intell. Prop., LLC v. Micron Tech., Inc.*, No. 14-CV-03657-SI, 2019 WL 2863585, at *12 (N.D. Cal. July 2, 2019), *aff'd*, 10 F.4th 1358 (Fed. Cir. 2021) ("[FRCP] 37(c)(1) provides that a party's failure to disclose or supplement information will result in that party being precluded from using that information on a motion, at a hearing, or at trial, unless that failure was substantially justified or harmless. This sanction applies to failures to supplement discovery responses in accordance with Federal Rule of Civil Procedure 26(e).").

Second, the only description of how a Cast-enabled media player (such as a Hub device) retrieves media from backend servers set forth in Google's interrogatory response is general, not apparently limited to any single "playback path." See Ex. 11, 17. It does, however, follow discussion of a mobile device transferring playback to a Cast-enabled media player. Id., 16-17. Thus, if anything, Google's only description of a Hub device retrieving media from backend servers is in connection with "a user initiat[ing] playback on a first Hub device ... by transferring playback to that Hub from a mobile device" (G.Br., 9), what Google claims is the first new "playback path" found in Dr. Schmidt's report. In this way, Google's own interrogatory response sets forth that there is no "substantially different" functionality for different "playback paths" and demonstrates that Google itself understood that Sonos's contentions were not limited to the single "playback path in which (i) a user initiates playback on a first Hub Device ... using the display on the first Hub Device" G.Br., 10.

Third, Google never argued that a Hub device does not satisfy claim 1 of the '033 Patent on the basis of how it "retrieves media from backend servers." In fact, the only non-infringement position advanced by Google that is specific to a Hub device is in connection with "detecting an indication that playback responsibility ... has been successfully transferred" Ex. 6, 60-61. The

only other non-infringement position advanced by Google that could also pertain to the Hub device is Google's unsupported position that a "remote playback queue provided by a cloud-based computing system" is limited to a playback queue provided by a third party. *Id.*, 60. Thus, again, if Google genuinely believed that Sonos's Hub-based infringement theory was limited to only the one "playback path" whereby a user initiates playback via the Hub's touchscreen, Google would have identified the allegedly "critical" difference for this "playback path" in its non-infringement positions. It never did.

Thus, Google is exercising nothing but gamesmanship here, feigning an overly-narrow understanding of Sonos's Hub-based infringement contentions to manufacture a challenge to Dr. Schmidt's reports. *Cf. MasterObjects*, 2022 WL 4856269, at *3 (explaining that the Court will not "risk gamesmanship by encouraging parties to leave broad patent disclosures unchallenged in order to challenge expert reports instead."). The Court should reject this gambit.

D. Google Ignores that Its Own Expert's Late-Breaking Theories Are the Cause of Dr. Schmidt's DoE Positions

In arguing that "Dr. Schmidt presents two new doctrine of equivalents arguments" (G.Br., 11), Google conspicuously fails to mention that Dr. Schmidt presents these arguments only in *response* to Dr. Bhattacharjee's wholly new non-infringement positions that Google never advanced during fact discovery. *See* Ex. 3, ¶¶107-10, 167-70, 175-76, 179. Dr. Bhattacharjee's new non-infringement positions are challenged in Sonos's motion to strike that was filed a handful of hours before Google's present motion. Dkt. 464, 12. For this reason, Dr. Schmidt's doctrine of equivalents arguments are contingent on Dr. Bhattacharjee's new non-infringement positions and will be mooted if the Court strikes Dr. Bhattacharjee's new positions.

To recap, despite having Sonos's interrogatory seeking Google's non-infringement positions since August 7, 2021, Google advanced limited non-infringement arguments for the '033 Patent throughout fact discovery, relying largely on an argument now rejected by the Court that the claimed "remote playback queue" cannot be satisfied if it is not provided by a "third-party." Literally the day before fact discovery closed, November 29, 2022, Google advanced several new non-infringement positions under the guise that these positions were responsive to Sonos amending

its infringement contentions regarding the accused Hub device's "stream transfer" functionality. Ex. 6, 59-61. In this way, these last-minute non-infringement positions were ostensibly limited to Sonos's Hub-device infringement theories rather than Sonos's user-device (e.g., smartphone) infringement theories. The DoE positions that Google complains about now only relate to the latter theories.

In stark contrast, as explained in Sonos's motion to strike, Dr. Bhattacharjee's non-infringement report sets forth numerous positions never advanced by Google—not even in the final days of discovery. Dkt. 464, 12. Germane here are Dr. Bhattacharjee's new arguments that the "remote playback queue" is immutable such that any change to the contents of the accused "remote playback queue" or its location within the "cloud-based computing system" results in non-infringement for failing to satisfy limitations 1.4 and 1.7. *See* Ex. 3, ¶¶167-70, 175-76; *Asia Vital*, 377 F. Supp. 3d at 1003-1005 (striking from expert rebuttal non-infringement report a theory not set forth in party's response to interrogatory seeking non-infringement positions).

Google laments that "there is no justification for Sonos to have waited until Dr. Schmidt's reply report on infringement to present [his] new doctrine of equivalents theories." G.Br., 12. However, it was not until Dr. Bhattacharjee's non-infringement report--served *after* Dr. Schmidt's opening infringement report--that Google first advanced these new non-infringement arguments. Of course, Dr. Schmidt could not have responded to these new non-infringement positions any earlier than his reply infringement report.

At bottom, Dr. Schmidt's doctrine of equivalents opinions that Google seeks to strike are directly responsive to non-infringement positions improperly advanced for the first time in this case in Dr. Bhattacharjee's non-infringement report. If the Court strikes these new non-infringement positions from Dr. Bhattacharjee's report, then Dr. Schmidt need not offer his doctrine of equivalents opinions.

1	IV.	CONCLUSION
2		Sonos respectfully requests that the Court deny Google's motion to strike in its entirety.
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